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BALTIMORE: TUESDAY, SEPTEMBER 26, 1837.

We are pleased to learn that Dr. *Joseph Muse*, of Dorchester county, has several acres in the culture of the sugar beet, and that it is his intention to manufacture them into sugar. In such hands success is certain, and we think we may safely conclude that our eastern peninsula will be indebted to the enterprise of Dr. M. for introducing amongst its farmers a most lucrative branch of rural economy. Suppose that each farmer only made his own sugar and molasses, what comfort and saving it would be to his family and purse.

*A Cure for the scouring in calves*—Take a table spoonful of finely powdered chalk and a like quantity of ground ginger, put it in a bowl, pour boiling new milk on it, say half a pint, stir it well and then give this dose about milk-warm, night and morning, to the calf, and in nine cases out of ten two doses will be sufficient to stop the disease.

*Raising of Calves*—The best method of raising calves we think is to do so by hand. If taken from the cow as soon as dropped, there will be no diffiulty in teaching it to eat. Loblolly made of half a pint of corn meal and a pint of new milk given to it about thrice a day will be sufficient to keep it. It is the easiest thing imaginable to teach the calf to suck up its food; by simply pressing down its head into the pan containing the mixture with one hand, and inserting the fore finger of the other into its mouth, it will instinctively suck up its beverage. If it be desirable to husband your milk, you may begin to decrease the quantity which you add to your loblolly when the calf is about three weeks old, putting in less milk each day until the calf imperceptibly forgets its taste altogether. When the calf is six weeks old you may turn him out in a grass lot; but if you desire to push its growth, continue its loblolly twice a day; by doing so you will increase its size fully one-third.

## BLUE GRASS AND MEADOWS.

The following article we copy from the Washington Republican, published at Jonesborough, Tennessee. It contains much valuable information upon subjects of vast importance in husbandry. It will, perhaps, appear strange to many of our readers that *Blue grass* is in such high esteem in Kentucky; but their surprise will cease when they learn, that the graziers in that state consider it the very best *grazing grass*, and second only to *timothy* for hay.

I thank my worthy correspondent for the compliment he is pleased to pass upon my numbers, as well as for the evidence he gives, that I have correctly understood and stated the management of the best graziers of Kentucky.—But I beg leave here to say, that he *can add*, and I hope he will add much to my numbers, or to the columns of the Farmer which will be valuable to every one interested in the culture of the soil. Grazing has long been his study, and he has scrutinized and practiced remarkably well. Even in the letter just quoted, where he describes what would be a ruinous practice for the grazier to follow, he has so completely delineated what has always been our practice, that nothing could be better calculated to convince us, that we have *always failed* because we have *always done wrong* in the making of pastures, and at the same time he gives every reason to hope success for a better system of management. I have therefore extracted the greater part of it, as a valuable communication to the readers of the Farmer. And let me here remark, that other gentlemen have given me the same history of the origin and progress of the grazing system in Kentucky. Men have told me, that they believed the two Cunninghams, (Isaac and Robert,) quite foolish or deranged in their first outset, and that after the success of these two men, they then joined in the common sentiment, that blue-grass would grow no where in Kentucky except on Strodes creek: but now these very men hold and practice largely upon the third system, that is, thet blue-grass will grow finely in many portions of Kentucky, Tennessee and other States which have not yet been tried. Mr. Harland and Major Rush of Sumner county in this State were extensive graziers in Kentucky, upon lands which they themselves had once supposed unfit for grass; and now they have sold their proven farm and emigranted to this State with several other highly respectable and extensive graziers, to risk their fortunes upon the grazing qualities of our soil. The latter gentleman particularly, as well as Maj. Miller, told me that they were certain that ours is a fine stock country, and all the emigrants from Kentucky to Sumner county, as far as I could learn their sentiments, are highly pleased with their prospect in the grazing business.

But Blue-grass must stand aside a little, till I say something of the best system of managing Meadows, and give some additional evidence to the foregoing letter, that our country is well calculated for meadows, if rightly managed. I shall aim to condense my own experience, and what I have derived from others, in as few words as possible. To set a timothy meadow, you have four important points to keep in mind.

1st. You should sow early enough in the fall, to give your grass time to get a root sufficient to prevent the winter freezes from throwing the grass out of the ground; or then, if you sow in the spring, your sowing should be early enough to give roots to the grass, that will enable it to withstand the dry season of the summer.

2d. Your ground should be clean enough upon the surface, to enable the seed to get to it.

3d. Your soil should be sufficiently compact, to enable the tender roots to support the young plants, and to aid in preserving them from the freezes of winter, and the droughts of summer.

4th. Always sow seed enough, to insure a dense stand all over the ground, that will take possession of it at once, and keep down every other growth.

The surface may be made in good order, where you wish to sow in the fall, upon woodland, by burning all leaves and trash off. But if you wish to sow old land, or any cleared ground, it should be ploughed well, and harrowed, or brushed till it is completely level, and fine. Your ground thus prepared is ready for sowing. Put one and a half gallons of timothy seed to the acre. Your Woodland Meadow will need nothing to be done to it after sowing; but that sowed on ploughed ground, should be harrowed or brushed in, and then rolled; or which would answer the same purpose, the brush should be dragged over it several times, so as to press the surface well. The fall sowing in this country, should be about the 20th of August, or the 1st of September, and the spring sowing, should be in January or February. Your spring sowing, should be on naked, compact ground; and if you have to plough in order to cleanse the ground, you should do the ploughing and harrowing in the fall, and let the ground lie till January, or the time you are to sow—then scatter your seed upon the naked surface, and do no more to it. The quantity of seed to be sown at this season, may be varied from one gallon and a quarter to two gallons per acre, always sowing most abundantly where your land is most liable to grow up in weeds.

If your purpose be to sow in the fall, upon ground which is covered with Nimble-will, you need do nothing to the ground at all; but sow, among the grass about the 20th of August, from one and a half to two gallons per acre. To make Herds-grass Meadow; prepare and sow Timothy as before named, and then sow just as much

Herds-grass as if no Timothy were upon the ground, say from one and a half to two and a half gallons to the acre. Thus when you put on the ground a full quantity of both kinds of seed, your Timothy will come immediately, and serve as a Meadow, till the 2nd or 3nd year, when the Herds-grass will begin to crowd it out, and in the mean time, all weeds will be kept down by the Timothy.

Any rich lime-stone land, will do well for Timothy or Herds-grass, whether upon a mountain or in a valley. It is true, that Herds-grass is preferable to any other kind, where you wish to make meadow in a swamp or marsh; because it will grow well there, and convert mire into firm ground. But if you have no swamp, you need not despair of having a meadow for that reason. Because, in this country, herds-grass will grow nearly or quite as well, and timothy even better upon rich upland, than in a swamp. I know this sentiment will contradict the opinions of most farmers in this country; for it is a common prejudice, that meadows will not prosper, unless they are in swamp. But my observation goes to prove that both timothy and herds-grass will prosper finely upon our rich hill sides, and that hence every man may have a meadow.

For the *preservation of Meadows;* after they are once well set, feed your cattle upon them, every winter, in November and December, with timothy or herds-grass hay, shucks, straw, or any thing you give your cattle. Do not fail to do this even for one winter, and be sure to have no stock on your meadow in the spring; and you cannot fail to have good crops of hay.

From the extract of the letter, which I have quoted, the reader may readily see, that our meadows have run out here and grown up in weeds and briers, because we have either not grazed them at all, and ruined them in that way, by leaving the sod lifted up, and detached by the frost, to die in the summer; or then we have grazed them without system, till an extermination of the grass has been the consequence. The common practice here, which we have called "taking care" of meadows, is just what would ruin them in any part of the world. From what I have learned, of the reasoning and practice, in the hay-making districts of Great Britain, and of all parts of the United States, where meadows are profitable, the very practice which has always prevailed here, in the management of meadows, is just what would cause the ruin of meadows in all those countries. And I am well warranted in the belief, that our usual practice or culture, would result in the ruin of meadows in any part of the world. Why then, should any one decide, that nature has not adapted this country to meadows, when his opinion is predicated upon just such experiments, as every one acquainted with the subject would expect to result in a failure. Let us learn to manage as others do, who succeed well; and then, if we fail, let us still study our soil better, and try other modes before we give up the important matter. But I must give some cases in proof, that meadows will prosper here. Wm. Hardin, deceased, of Davidson county, sowed a timothy meadow, about 12 or 13 years ago. He grazed in the winter, and none in the summer. A respectable gentleman informed me that he had as many as fifty mules upon that meadow at a time. Guessing at the amount, I suppose the meadow contains not more than ten or twelve acres. I am informed that Mr. Hardin once sold hay from it, to the amount of $1100 in one season. I saw it in May last, and it was as fine as when I first saw it about seven years ago.

Mr. Daniel Safferans, of Gallatin, has four acres of timothy meadow, about 12 years old, from which he sold the present year's crop, delivered on the spot, to Mr. Lewis, for $275.

John Gordon, of this county, has a herds-grass meadow about six years old, which he supposes to yield between four and five tons to the acre; and says that he would not rent it for $30 per acre.

The following statement was written to me by Rev. John W. Bowen, Smith county, Ten. Aug. 2d, 1837.

John McMinn, Esq. 5 miles south of Statesville, Wilson county, has a Timothy Meadow, which he sowed in 1800, and has mowed every season since. It contains about three and a half acres. It has made hay enough to feed all his stock for twenty-eight years, which never consisted of less than five horses and fifteen cattle, and sometimes he had double that number of each. Squire McMinn has always grazed it in August and September with his stock; and during the winter and spring, until the first of April, his sheep (generally about 15,) have always grazed constantly. He assured the writer, last April, that he would not now take $60 rent for his little meadow.

Respectfully, J. W. BOWEN."

Mr. Henry L. Moores, who saw this Meadow, in company with Mr. Bowen, conveyed his idea of it to me, by saying: "when I saw it, I was at once reminded of the best meadows of Kentucky."

Esq. Sewell of Wilson County, has a herdsgrass meadow, which yielded over four tons to the acre in 1836..

These specimens are equal to the meadows of Great Britain, which has been recently sending hay to the U. States for sale. In fact, Professor Law, of Edinburg, supposes their meadows to average less than two tons per acre. But I must stop to give room for a letter from Mr. Hughs of Kentucky.

"Fayette County, Ky., June 19, 1837.

Dear Sir—I received, a few days since, from Wm. P. Hume, Esq. of Bourbon County, a note requesting me to inform you of the number of acres of land in my farm; what quantity I have in pasture; how many hands I work; and what have been my annual profits for the last two years. My farm contains between 18 and 1900 acres. I cultivate about 200 in corn, about 20 in meadow, about 100 in wheat and rye; and the balance is in pasture. I work 10 hands. My farm is what we call here a grazing farm. I buy, graze, and feed about 300 cattle annually; raise and sell about 200 hogs. My profits on cattle, hogs and other articles sold off my farm in 1835, were $9,945 00; in 1836, $10,475 00.

I would take pleasure in communicating to you at any time, any information I am in possession of on this subject.

Yours respectfully,

JACOB HUGHS."

*Francis H. Gordon.*

Circumstances prevented me from seeing Mr. Hughs, last fall, as I was recommended to do; but I was informed that he is a good farmer, and the above letter confirms the information.

FRANCIS H. GORDON.

## FRUIT AND FRUIT TREES.

We are indebted to a pamphlet published by Messrs. *Jackson & Scram*, of *Poughkeepsie, New York*, for the following "*concise treatise* on the growing and propagating of *Fruit Trees, Shrubs* and *Vines*," and commend it to the favorable notice of our readers, as containing much excellent information in a form to render it highly acceptable, being founded on the theories of approved authors, tested by several years practice, and improved by practical experiments.

### INTRODUCTORY REMARKS.

Most fruit is in a great degree nutritious; the best kinds are a pleasing luxury, and the greater part, when ripe and in a perfect state, used with moderation, are not only inoffensive, but beneficial to health.

The art of growing and propagating fruit trees and good fruit, will be found to be plain, simple, and easy when rightly understood, and in no wise difficult to attain; but it has not received the attention it deserves, and consequently fruit trees consist, in a great measure, of casual growth, or such as are the result of careless, unskilful management, and are either stunted, or diseased, or both, and bear fruit which is unsound or inferior in quality, and the wood is of little value for timber or fire-wood.

Trees, when stunted from the seed, or afterwards, can rarely be restored to that vigour of growth which they have lost; and when kept too long in nurseries in a crowded state, which prevents their growing, they become too old to transplant, and either die in the operation, or continue dwarfs ever after.

Trees are frequently grafted and budded, not only when stunted or diseased, but when too large and old, and a great number of grafts stuck all over the trees without regard to being placed in the leading and best placed limbs. The grafts may safely, as is the practice, be *warranted*, as they will live; but the natural stock will continue to form the bulk of the top and bearing branches, and the grafts will remain diminutive and bear fruit in proportion. 25 grafts well placed are better than 100 placed at random:—10 grafts judiciously placed in a tree of moderate size, will change the whole top in a few years, where 200 grafts scattered all over a large tree, will not materially change its top or its fruit.

No person can, therefore, expect to reap any advantage from grafting, unless on small and middle sized trees, and such as are sound and vigorous: all others should be cut down as cumberers of the ground.

Pruning and training are much neglected, or very unskilfully done, making trees of uncouth shape and condition; trees, when hollow, are in a rapid state of decline; they will soon rot down. They are made so, in most cases, by pruning off limbs and branches, leaving stumps on the trees; these rot off, leaving a hole in the tree, which ad-

mits water, and soon rots and renders it hollow. Haggling off limbs with an axe has the same tendency. Pruning should always be done by cutting or sawing off limbs or branches *smooth* and *even* with the trunk or main branch from which it is taken. The wound will then soon heal over and be covered with bark, which is prevented by stumps or snags being left, as the bark cannot grow over dry snags.

Success in growing and propagating fruit trees depends, like every other branch of business, on practical skill *how to do it*, and industry and perseverance in the performance. When you plant an orchard, or single tree, plant sound, vigorous young trees, and no other than those you *know* to be such, either by having raised them yourself, or, if procured from a nursery, on such person's representations and assurances as you can safely rely. If you are the owner of trees bearing common or inferior fruit, save, in general, none but the sound, small and middle sized, which graft with the best kinds of fruit. Regulate all by pruning so as to form full, neat tops, suitably open to light and air; keep the earth around, and as far as the roots extend, mellow and suitably rich; secure them well by staking or boxing; water them a little in droughts, until they have taken root.

Having thus given a general view or outline of the subject, I shall now proceed in detail to describe the method of producing sound, hardy, durable trees, and good healthy fruit, and of making the business successful, agreeable and profitable.

*On the growth and propagation of Fruit Trees, Shrubs and Vines.*

These may be propagated, 1. *By grafting*; 2. *By budding or inoculation*; 3. *By cuttings and layers*; *and* 4. *From seed.*

SEASON FOR EACH.

Grafting must be done in the spring, and may be performed as early as the middle of March, and as late as the first of June.

Budding may also be performed in the spring after the bark peels freely, with buds of the previous season's growth, or in summer and autumn after the buds of the same season have attained their growth, which is preferable.

Trees, cuttings and layers must be planted in the fall after frosts and before the ground is frozen, or in the spring after the frost is out and before vegetation has advanced much, which is also a proper time for pruning.

Seed should be planted so late in the fall as not to vegetate but little, if any, or so early in the spring as to have the advantage of the whole season to grow and ripen in, to withstand the winter frosts.

GRAFTING AND BUDDING IN GENERAL.

Grafting may be performed on most kinds of trees on large or small stocks. Different methods of grafting should be used according to the size of the stock. It may be done in any manner by which the scions and stocks can be united. Those methods most in use will be noticed. Budding will only succeed on small stocks of *vigorous growth*, from the size of a yearling shoot to half an inch, and not exceeding about three-fourths of an inch in diameter.

The apple and pear succeed well either by grafting or budding.

The peach, apricot and nectarine seldom fail when budded, but rarely succeed by grafting.

The plum and cherry take without difficulty by whip grafting, which is the best method to propagate them; they may also be propagated with tolerable success by budding (the plum more readily than the cherry) and likewise by cleft grafting, when you succeed in splitting the stick without splintering the wood or injuring the bark, which can seldom be done.

Grafting and budding, for the most part, can only be practised with success on stocks of the same kind with the bud or scion. That is to say, the apple on apple stocks, pear on the pear, the cherry on the cherry, &c. Peaches, apricots and nectarines may be propagated on each other, and together on the same tree. *The apricot succeeds well on the plum*, and is more durable than on the stock of its own kind, or on the peach or nectarine, but not of so quick growth. The peach and nectarine may also be propagated on the plum, but will outgrow the stock, unless a plum stock be used growing equally or nearly as fast. Trees of the common small black, and red cherry, make excellent and perhaps the most durable stock for cherries of all kinds. The quince and the pear may be grafted on a thorn stock, &c.

GRAFTING.

Scions for grafts may be cut at any time in winter, and even late in the fall. The *proper time* is in February or March, before or at the time the buds, in this respect, and like kernels of grain, if disturbed when they swell and sprout, they become of slender and sickly growth, and rarely recover their natural vigor. Cut for grafts shoots of the last spring's growth, with a little of the two years old wood. Take your grafts from fruitful trees, bearing good fruit of the kind: that is, if from a pippin tree, let it be from such as bear the best of pippins. The best grafts are those about the size of a pipe stem, taken from bearing branches, and not of side shoots or suckers, nor of the rank growth of the top of trees; these are apt to continue their rank growth, and outgrow the stock, and are not so soon in bearing, nor so fruitful; if too slender they will not be thrifty, nor take well—tie up the grafts of each kind by themselves, with some distinguishing mark; put them in a cellar or out-house, to keep them from being saturated, dried up, or frost-bitten; set in a box of earth one-third their length, the earth kept moderately moist by occasional sprinkling, to keep them plump and prevent their shrivelling, but not so wet as to cause them to sprout.

Scions may be used for grafting, fresh gathered, at any time during the season of grafting before the buds open to leaf; early gathered grafts will, however, take more readily.

Take 8 ounces of *pure transparent rosin, free from sediment*, about 2 or 3 ounces of bees-wax, and lard of half the size of a hen's egg, melt them over coals or a slow fire, stirring the composition with a stick; after thoroughly mixed and melted, empty it into a pail of cold water, rub some lard over your hands to prevent its sticking to them, and work it together thoroughly, as shoemakers do their wax. If the composition is too hard and does not work freely when making or while using it in grafting, rub over it more lard and work it in as before; if too soft add rosin, and so on until it becomes suitable for use.

CLEFT GRAFTING.

Cut down all diseased and stunted trees, and graft those only which are healthy and thrifty, of not exceeding 6 or 8 inches in diameter, in some of the leading, best placed and thriftiest branches on the tree, with a view to changing the whole top. Trees of a large size may be grafted, and partially, and in some cases wholly changed, but not generally, without a great deal of labor and attention. Saw off the branches for stocks to graft on, at smooth places where they split well, and are in diameter of from one to two inches, prune the tree sufficiently to give room and air to the grafts, and gradually to force the juices of the whole tree into the grafts. Continue pruning each tree yearly, at any leisure time in the winter or spring, giving sun and air, and making room for the grafts as they grow, in such manner that if the grafts are of vigorous growth, in the third season to have cut out all except the grafts, and formed a new top. When limbs are taken off in pruning, it should be done with a saw or chisel, not an axe, and if large limbs, a coat of tar, paint or the composition mentioned, put over the wound.

Having the stocks prepared as above, and being furnished with grafts and the composition, with a case knife or other convenient instrument and hammer, split the stock in the middle, drive in a wedge of hard wood of iron of 6 or 8 inches in length, and open the split so as to admit the graft freely, prepare the grafts, either all for the same tree, or one by one as used, by paring off about an inch and a quarter of the end of the graft or scion to the shape of a wedge, leave that side of the graft which is to be put towards the centre of the stock of *equal* thickness with that part which is to be towards the outside of the stock, with a view that the pressure of the stock, when closing upon the graft, be on the *inside* and not on the outside of the graft, where it is intended to unite with the stock: the outside if a little open, will facilitate the communication of the sap from the stock to the graft; but if closed up tight, may prevent such communication and endanger the graft; insert the graft as far as cut in wedge form, matching the *wood* of graft and wood of the stock without regard to the outside or surface of the bark on either: take out the wedge with sufficient care not to disturb or displace the graft. To stocks a little over an inch in diameter, one graft is sufficient, if larger, two are necessary, leaving on every graft from two to four buds. Finish the work by covering the crown of the stocks and the splits on each side, whether containing a graft or not, with the composition about the thickness of wrapping paper, by drawing it into strings over them, and smoothing it down lightly with your finger or thumb, covering the whole perfectly tight, to exclude air and rain, and more especially to prevent the sap from running out. The sap being confined, will force its way to the graft, which will readily receive it.

Stocks with only one graft will be improved by having the corner opposite the graft pared down to about the middle of the graft. It will enable them to heal over sooner, without leaving defects.

If the stock split uneven, cut it a little to fit the graft. If the bark splits from one side of the stock and adheres to the other, cut it down even with the wood, and match the graft to that side only, in case the other is too badly injured.

The grafts should be examined occasionally, and the shoots from the stocks ought not to be suffered to acquire a luxuriant growth, but *gradually* thinned out and cut away as the graft acquires growth and strength to take the juices of the stock.

Let the limbs or stock for grafting be cut off, when convenient, above and near small branches or shoots, to be left at first to draw the sap.

If the above directions are substantially adhered to, few grafts will fail; and a middle sized tree of vigorous growth, may have the top changed, and in a fruit bearing state, in about three years.

### WHIP GRAFTING.

This method is particularly calculated for nurseries, and is most expeditious and advantageous on all kinds of young trees, (except the peach, apricot and nectarine, on which budding may be considered, *at all times*, preferable) and is peculiarly adapted to the cherry and plum, and all such as do not split well. It may be performed near the ground, or at the height of five or six feet, near where you intend to form the top, or in limbs from the thickness of a pipe-stem to about three-fourths of an inch, and too small to cleft graft; and the top of young trees having such limbs, may have their top changed by this method, as large trees by cleft grafting; and if the tree have some large limbs to cleft graft, but not many, it may be partly cleft and partly whip grafted. The manner is this: provide yourself with the composition before mentioned, soft woollen yarn, and a sharp pen-knife; begin the work by cutting off the head of the stock, at some smooth part, by one clean slanting cut upwards, so as to form a slope on one side about an inch and a half or two inches in length, and make a small slit from near the middle downwards, to receive the tongue of the scion; then prepare the scion, by cutting it with three or four buds, preferring the lower or thick part, and cutting the lower end on one side also in a sloping manner, the length of and to fit the slope of the stock, as if cut from the same place, that the rinds of both may join, as nearly as possible, in every part; then make a slit upwards in the slope of the scion, so as to form a sort of tongue, to fit that made in the slope of the stock, which insert therein, so that the rinds of both may join together, or on one side, if the stock is larger than the graft; then bind the parts together with the woollen yarn, bringing it round the stock and graft moderately tight, and fastened accordingly; make a plaster of the composition between your fingers and thumbs, and wrap it round the stock and graft over the ligature, squeeze it in your hand, so as to make it snug and tight, to keep the sap and exclude the rain and air, particularly at the ends. When the buds on the grafts have grown four or five inches, which will be about the middle of June or earlier or later, according to the season, the ligature becomes too tight, and will endanger the grafts;—place the point of a knife on the upper side of the bandage or plaster, press it down through the composition and threads so as to cut them all in two, and take off the bandage and plaster entire. If the stock is large, and the graft is matched and united only on one side, leaving the other side exposed, put the plaster taken off, or a little composition, over the exposed part.

### ROOT GRAFTING.

This is done by whip grafting upon young seedling trees of the size of a quarter to an eighth of an inch, taken up, whip grafted at the root, and re-planted, and is practiced in nurseries for want of better stocks. It may also be done upon pieces of roots to about 3-4 of an inch in diameter and less, either by letting the roots remain or separating, and after grafting, replanting them. No composition is required; the yarn by which the graft roots are tied together will rot off and make room for growth. Larger roots may be cleft grafted, and then the composition is to be used.

### CROWN GRAFTING,

May be practiced upon such stocks as have become too large and stubborn to cleave, and then two, four, or more grafts inserted round the crown of the stock in a circular order, introduced between the bark and wood; this cannot be done until the bark peels freely—the grafts are subject to be blown off. The stock will be a long time in healing over, and is subject to decay.

### SIDE GRAFTING,

This is done by inserting the grafts into the sides of the branches without heading them down. To fill up any vacancy on trees thus: prepare the scion as for whip grafting, by sloping and tongueing it; then cut a chip from the place where the graft is to be inserted, of the same size with the slope on the graft, in such manner that the wood on the slope of the graft will cover and fit the wood laid bare by taking out the chip; cut a notch or tongue on the stock to fit that on the graft, and match them firmly together; cover the parts matched with composition when necessary, first binding them together as in whip grafting. Nothing further is necessary, except pruning, as directed in cleft granting.

### BUDDING OR INOCULATING.

Budding should be performed on stocks of thrifty, vigorous growth. Trees may be raised by budding young trees about half an inch in diameter, near the ground. Buds inserted in this manner, will grow 5 and 6 feet and upwards in one season, and will form straight and smooth stems and finest trees. Budding may also be performed in the branches of young trees in the top, and leading, and side shoots; but if in the season of grafting, and you have plenty of scions, the latter is preferable. Roses, Lilacs, &c. &c. may be budded at any time after they are full grown, and as many kinds as there are of either, may be put on the same stock together, and form a pleasing variety.

### TIME AND SEASON FOR BUDDING.

The seasons proper for budding are two. 1st, the spring, beginning after the sap flows and the bark peels freely, until the first of June, with buds cut from scions preserved as for grafting, and before used buried or immersed in water, or fresh from the tree; or 2d, (and which is the proper season) in the summer and fall, with fair, full grown buds, of the same season, taken from the well ripened shoots, fresh from the tree, or kept with care only for a short time; otherwise it will be labor lost. In the summer or fall it should not be done so early as to cause the bud to shoot the same season; the short time they will have to grow before cold weather, will not admit of their becoming ripened and prepared to withstand the winter frosts. On the other hand, it should not be put off too late, but be performed while the sap flows and the bark peels freely, and before the trees or shoots become bark bound, which time varies in the different kinds of trees, and is a little sooner or later according to the season, whether it be wet or dry, but generally as follows: the cherry, plum, and pear tree become bark-bound, by the 1st of August, and should, together with the apricot, if worked on plum stocks, be inoculated the second or third week in July. The apple trees become bark-bound about the 1st of September, and should be budded in August. The peach, apricot, and nectarine about the 20th of September, and should be budded between the 1st and middle of that month. It may, however, be done later, and if occasion require, after the bark begins to fasten, by rubbing it with a smooth knife handle or other substance, and thereby loosening it, but this is not safe. The shoots intended to be taken, are to be selected in the same manner as for grafting, and should be as fresh from the tree as circumstances will admit, and kept in the shade and moist, not saturated, and the work performed in cloudy weather, in the shade or in the morning or evening.

### MANNER OF BUDDING AND HEADING THE STOCKS.

This may be done by making incisions in the stock like a cross † or a T, then raising the corners and inserting the bud; but the following is the most simple, easy, and successful method: having provided suitable shoots from which to take the buds, cut off the leaves a little above the buds; furnish yourself with some soft woollen yarn and a sharp penknife; fix upon a smooth part of the side of the stock; make a horizontal cut across the bark to the wood; then from this cut make 2 slits downwards, parallel to and apart from each other, the width of the bud with its bark, when severed from the shoot; then with the point of your knife raise the bark next the horizontal cut between the slits, and peel it down their whole length, clear from the wood; make a slit in the bark peeled down. Next prepare the bud; place your knife about half an inch above the bud, and cut down through the bark into the surface of the wood, and so along under the bud, and cut about half an inch below it, taking out as little of the wood as may be; then turn down the loosened bark, insert the bud over the wood so as to cover it; then close the bark over it, leaving the bud to project up through the middle slit; break off about 20 inches of the yarn, and place the middle over the bark, and just below the bud, binding it round the stock to the back side of it, then cross it and wind the thread around the stock over the bark, above and below the bud, not over it, until it is all closed up, so tight as to prevent the sap from communicating; then tie a knot and the work is completed.

If it be spring, and the buds taken from scions preserved as for grafting, insert the bud with the wood; in summer or fall the wood may be separated from the bud. But if on separating the wood there appears a small hole on the under side, opposite the bud, the bud will not sprout and is rendered useless. It is therefore generally best

to insert the bud with a little wood. It is considered preferable to insert the buds on single stems and upright branches on the north or shady side of the stocks, and on lateral branches; insert them on the upper side to shed water and make a perfect growth. In about three weeks the bandage must be taken off by cutting across the yarn, on the side of the stock opposite the bud. When the buds begin to shoot, the stock must be headed down, in spring budding, at or shortly after the time the bandages are taken off; for autumn budding, not until the next spring. This is performed by cutting off the stock about four inches above the bud, sloping upwards from the side opposite the bud. After the bud has grown five or six inches, tie a string around the stock a little above the shoot, and bring the ends to the outside and there tie them together, so as to keep the shoot in a perpendicular position, and brace it against the wind, which may otherwise blow it off. The shoots which put out from the stock should be cut or rubbed off occasionally.

After one season's growth of the bud, the stump left above the bud should be cut down close to the shoot and sloping from it, and a little composition put over it.

### SEED.

Select proper seed from healthy trees, sound, ripe and fair fruit. Let the seed be put into sand as they are collected, and put into a cellar, or other cool, damp place, until the proper time to plant them. If the seeds are kept in a warm and dry place, they seldom vegetate after it, and when they do, are generally of a sickly growth, and seldom make large and vigorous trees.

### THE SEED BED.

The seed bed should be planted in the fall, before the ground is froze, or as early in the spring as the ground is in a state to be ploughed or spaded. Having selected your seed, prepare the ground to receive it; this should be of good soil, not subject to standing water. Let it be spaded sometime previous to planting. Plant the seed in rows, fifteen to eighteen inches apart, from one to two inches deep, according to the size of the seed and lightness of the soil. Apples, pears, and the like, eight or ten, and stone fruit, three or four in a foot, in the rows. Cover them up, and press the ground moderately over them.

Stone fruit should be cracked a little if planted in the spring, which need not be done if planted in the fall. During the ensuing season, and every succeeding season, until the trees are removed, hoe out the weeds, loosen the ground, and thin out the seedling plants, (leaving only the most vigorous) to from eight to ten inches apart. Water them occasionally in a drought.

### THE NURSERY.

After one season's growth, either early in October, or immediately after the frost is out in the spring, trees that have grown about a quarter of an inch in diameter and formed perfect roots may be taken up and placed in nursery rows. Apple and other trees of slow growth which have not attained that size, nor perfected their roots, should remain another season. The nursery into which the young trees are now to be transplanted, should be in good soil, open to the sun and air. After being ploughed or spaded, and levelled by raking or harrowing, dig trenches lengthwise, from 2½ to 8 feet apart; then take up the trees from the bed, prune the roots and top with care, thinning out the branches and roots, cutting off the perpendicular or tap roots, and all irregular roots and branches, leaving only such roots as are in or near a horizontal position. Every tree that does not contain a sufficient number of well placed roots should be thrown away. Open trenches six or eight inches deep, and wide enough to admit the roots freely. Dip the roots in water, which will make the earth adhere to them, and place the trees in the trenches from a foot to eighteen inches apart; draw the ground upon the roots, raise the tree a little so that the ends of the roots incline a little downwards; then gradually fill up the trench, at the same time pressing and packing the ground moderately around the roots. In dry weather, water the trees twice or three times a week, with rain water, or water warmed in the sun, about a pint to each tree, until they have thoroughly taken root. Plough between the rows and prune them every spring, keeping them clear of weeds during the season. Trees planted from the seed bed which have not been root grafted, will be fit to bud in the budding season of the summer and fall following, or to be whip grafted in the following spring. Those who prefer root grafting are referred to the article on root grafting.

Peach trees and the like, will be fit for transplanting in two or three years, and apples, plums, &c. in from three to five years. They will then have attained about six feet in height, and a proportional thickness, and will make large, healthy, fruitful, and durable trees.

### LAYERS AND CUTTINGS.

Many kinds of shrubs and vines may be propagated by cuttings or slips, and most, if not all sorts, may be propagated by layers, and in either case the work is to be done early in the fall, shortly after the leaves are shed, or in the spring, as soon as the ground will admit of it.

### CUTTINGS.

Cuttings should be taken from the shoots of the preceding year's growth, from bearing stocks, of sound and perfect growth, close jointed, and neither rank and pithy, nor small and imperfect, and planted six or eight inches deep. Slips from shrubs, such as gooseberries and currants, may be from twelve to eighteen inches long; and for the grape, woodbine, and other vines, from sixteen to twenty inches long. Plant shrub cuttings in an upright or perpendicular position. On the other hand, the grape and other vines must be planted sloping, and nearly horizontal, with the ends turned up in such a manner as to raise two or three buds on the cutting above the surface of the ground where planted. Before planting, the ground should be loosened for some distance round and the weeds kept down afterwards. Cuttings may be placed in a nursery a foot apart every way, and transplanted after one or two season's growth, or planted at first where they are to remain. Grape cuttings should be taken when pruning vines in the fall, buried during winter, and planted in the spring.

### LAYERS.

All sorts of shrubs and vines which admit of being propagated by cuttings, will succeed equally as well and some better, by layers, and many kinds may be propagated by layers which cannot by cuttings. Layers may be prepared in various ways. My object is to point out only the most plain and simple method, best adapted to common use, and for all ordinary purposes. Take for layers such young suckers or shoots as can be bent down to the ground without separation from the shoot or main stock; dig up and mix the earth alongside the shrub or tree from which the layer is to be selected; make a hole from four to six inches deep; prepare a peg or stick from six to eight inches long, sharp at one end and a hook at the other; cut out from the shoot intended for a layer the buds as directed for cuttings; when it is intended to raise a single stem, bring down the shoot and fasten it with the peg in the hole about twelve or fifteen inches from the end, then cover it over; raise the end of the layer so as to stand perpendicular from the ground, and press the earth around it. In one year the layer will have formed a root of its own, and may be separated from the main stock, the roots and branches pruned, and then planted permanently.

### GOOSEBERRIES AND CURRANTS.

Currants and gooseberries, and particularly the first, are usually suffered to grow in bunches composed of side shoots and suckers, which absorb all the moisture and substance of the earth, so that no herb or vegetable will thrive within a space of five or six feet from them; they increase until they choke each other, and become a heap of rubbish; the fruit is small, insipid, and unhealthy.—They can, with a little attention, be raised with a single stem, the fruit then grows more abundant, larger, and better flavored, which is effected by merely cutting out every bud, with a chip of the wood from all that part of the cutting which, when planted, will be at or below the surface of the ground.

### PLANTING AN ORCHARD.

In planting trees in an orchard or garden, where they are to remain, the same rules should be observed as in transplanting them from the seed bed to the nursery, in pruning, planting, watering, and previously mellowing the soil; they should be planted early in October, or as soon as possible in the spring, and the earth, unless it is ploughed, should be spaded four or five feet in diameter for a tree. They should be well secured with firm stakes, and tied up with whisps of straw or loose bandages of any kind, to secure them from being shook or loosened in the ground. The trees should be planted a sufficient distance apart so as to admit the sun and a free circulation of air when full grown: apple and pear trees at least forty feet, cherry and plumb 30 feet, peach, apricot and nectarine, 25 feet. Tilling by raising a succession of crops of grain and suitable manuring, particularly around the trees, and as far as the roots extend, will promote a vigorous and rapid growth; in a few years they will attain considerable size and bear fruit in proportion.

### SOIL AND SITUATION.

Low, wet or marshy ground is not suitable; it should be upland, or so much so as not to be exposed to standing water; should be open to sun and air, and tolerably rich.

That soil and situation which will bear goo

crops of winter grain, are well calculated for the cultivation of fruit trees, shrubs or vines. Occasional ploughing, digging, or in other way mixing or mellowing the ground, keeping down underbrush and weeds, and manuring are beneficial, and will at all times add to the health, vigor and fruitfulness of trees and vines.

TRAINING AND PRUNING.

Trees, when young, both forest and fruit, may be trained to any shape, from that of a lofty towering top, by pruning away the large limbs, except the leading, upright one, to that of a low spreading top, by cutting off the leading, upright limbs. Pear and cherry trees do well with a high top; other kinds make the best bearers with round tops; and no tree, except it be intended as a wall or espalier, should be suffered to form a top less than 5 or 6 feet from the ground: to this end, all limbs and branches, should, to that height, be gradually cut away.

Pruning should not be neglected, in divesting trees of suckers from the root, or side shoots, when they are not necessary to fill a vacancy; and generally, in promoting a free circulation of air, and in preventing limbs and branches or vines from intersecting or crowding each other, a medium should be observed, as pruning *too much* is injurious. The superabundance of sap will cause side shoots, suckers, and eventually decay. The limb or branch intended to be removed should be cut away clear and smooth, without leaving stumps or snags, and even with the trunk or main limb from which they are taken. Large wounds, or those of a moderate size, exposed to wet, should be covered over with tar, paint, or composition. If this is neglected, or stumps or snags of the branches cut away are suffered to remain, the stump or exposed part will rot in the tree, render it hollow, and in a few years destroy it. Many orchards have rotted, and are now rotting down from this cause.

DISEASES.

To prevent or cure diseases in vegetation, as well as animal life, the best antidotes and principal remedies are to *remove the causes which produce them.* To this end destroy caterpillars, all noxious worms and insects, prune off all unsound and affected parts. If this cannot be done without destroying its usefulness, cut it down and replace it with a young, healthy, vigorous tree.—Swine, rooting under trees, and birds frequenting the tops, building nests, unmolested, will, in a great measure, if not wholly, destroy insects and vermin.

When a tree is bark bound, covered with rough bark and moss, these must be scraped off; and being washed with soap suds, or covered with a coat of lime wash, will be beneficial; prune the tree, removing side shoots and suckers from the root, and stir and manure the ground, for the most part, at least as far as the principal roots extend. The soil being sod-bound, or barren, or covered with underbrush, or all together, are the causes of the difficulty; these being remedied, the tree will again thrive.

It is a mistaken opinion, that the diseases which destroy peach trees, &c., caused by grubs, can neither be prevented nor cured; either of which can be effected, *if properly and thoroughly attended to.* It is caused by an insect, in pricking the bark of the tree near the root, and depositing the seed which produces the grub, between the first of July and frosts in the fall. To prevent this, about a foot of the trunk of the tree next the root should be brushed over with a coat of some stickey, nauseous, or impenetrable substance, and this repeated as often as the substance wastes away, is washed off by rains, or crumbles away, during the time specified above, which may be tar, train-oil, or whitewash, and a little ashes or lime kept on the ground around against the tree. When trees are affected, either in the fall or spring, dig and remove the earth around the trunk, to expose and give free access to every part affected; remove the gum, search thoroughly for the holes in the bark by which the grubs entered, prick into the bark with a sharp pointed knife: more effectually to find and trace the grubs and their holes, cut away the bark over the holes so as to lay them bear their *whole extent, length and breadth*, smooth the edges of the bark, scrape off all the gum and filth, which remove, together with all the grubs found, wash the holes and parts cut and scraped with lye or soap suds, or rub a little dry ashes over them, and close up the space dug with fresh soil; examine the trees occasionally, and more particularly every spring and fall; repeat the operation to a greater or less extent, when necessary. By this means the grub will be subdued and exterminated, and the trees flourish.

## SPRING WHEAT

Has already superseded the winter species in Lower Canada, and in the northern section of the Union; and such are the casualties which the winter crop has to encounter, from the Hessian fly, from hard winters, and from the grain worm, for the latter, we have no doubt, will soon extend itself over the whole country, that we apprehend the farmers of the northern and middle states, at least, will soon find it advantageous to resort to the spring species of this grain for their main crop. Under this view of the subject, we think we shall be doing a service to the readers of the Cultivator by detailing what we know in relation to different species of spring wheat.

The *triticum æstivum*, or spring wheat, is said to be a native of southern Siberia and Sicily, whence its culture has been gradually dispersed through Europe and America. It ripens ordinarily about the same time as winter wheat, when sown very early; but when sown late it is fit to harvest in ten or fifteen days after the former. The following, among other varieties, are described in the books.

1. Having a red spike, or ear and grain.
2. Red spring wheat, with a white ear.
3. A white spike and grain. These three are all beardless varieties, of the same species, are not easily affected by moisture, and give a flour nutritious, but not so white, or in so large proportion, as the winter varieties. These are believed to be the common varieties cultivated among us.
4. *Sibeiran spring wheat*, probably the variety in Oneida, and already noticed on the authority of Dr. Goodsell. It is bearded.
5. *The Egyptian, or many spike wheat.* Loudon terms this a variety of winter, whereas with us it is a spring wheat. This is remarkable for its uncommon productiveness. The grains, however, do not yield so large a proportion of flour or meal as other species or varieties, and the flour is said to be scarcely superior to that obtained from the finest barley. It has been introduced in our country to a considerable extent.
6. *Spelt wheat*, noticed under correspondence.—Sown in spring.
7. *Italian spring wheat.* This is the variety which was introduced by Mr. Hathaway, of Rome, and which seems to have proved congenial to our soil and climate wherever it has been tried. It is bearded, the product is abundant, and the grain makes excellent flour.

There are besides those we have enumerated, several other varieties of spring wheat, which we do not find described, and with which we are not acquainted, as the Black Sea and Tea Wheat, which are probably mere varieties, which have been modified by climate and culture.

The white, or spring or summer wheats, flourish best on light soils. The ground however, requires to be well pulverized. A good preparation is a clover-ley, ploughed in May, and sown the 15th in this latitude, so as to escape the grain worm. The straw of spring wheat is generally shorter than that of the winter varieties, the berry less plump, the flour less abundant, and darker, but equally nutritious.—*The Cultivator.*

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*Smut in Grain.*—We are surprised to learn that smut is still permitted to adulterate and diminish our grain crops, when it is a fact amply and satisfactorily established, that steeping the seed grain twelve hours in brine, and rolling it in fresh slaked lime, before sowing, will prevent the evil. The *paper-brand*, *dust-brand*, the two species of smut, are parasitic plants, the minute seeds of which attach to the grain, and are propelled through the sap vessels of the plant, to the germs of the young grain. The salt and lime destroy the vitality of these seeds.—*The Cultivator.*

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*Packing Butter.*—During the summer months butter is usually lower in price than at other seasons of the year, and hence its preservation sweet and good when packed, may be an object in an economical point of view, at this pinching time of cash. Take a stone pot or jar that will hold 30 or 40 lbs. clean it thoroughly, and wash it in cold strong brine. Take of new sweet butter, well made, and free from buttermilk (if enough to fill the pot at once so much the better) work it well and put a layer of it a few inches in thickness in the jar, beat it down solid with a wooden beater, turning off the milk that will escape occasionally, then repeat the process until the pot is filled within an inch and a half of the top, with butter thoroughly pounded down. On the top of this mass pour one inch of clean pure brine, made by dissolving salt in warm water until saturated, and then cooled. Over this lay a clean cloth, and if this is secured by a cleanstone, it will be better than a board. Keep the jar at a low temperature, and the butter will keep good for an indefinite length of time, only examining it occasionally to see that it is covered with the brine, and renewing it if necessary. Last summer we put down some jars in this way and they kept perfectly fine for winter use; and Judge Buel has preserved butter in this way for twenty months in good condition. The only requisites appear to

be pure sweet butter to pack, solidity in the mass by beating, total exclusion of the air by brine, and the lowest temperature possible.—*Genesee Farmer.*

*Easy method of hiving Bees.*—Mr. Moses Winslow, of Westbrook, has described to us his method of hiving bees which he has practised with complete success for fifteen years, and has never known his bees to pitch on any other place than that prepared for them.

Drive down two stakes, about four feet apart, fifteen feet in front of the bee house, tie a pole across these stakes about three feet from the ground; then take a board about one foot wide and twenty feet long and lay one end on the ground at the front of the bee house and lay the other part on the pole between the stakes. Put up this board in the beginning of the season. The bees will pitch on the under part of this board, and that end which lays on the ground should be raised to a level with the other and on a barrel, box or something else. Then turn the board upside down and place the hive over the bees and fasten it with props to prevent the wind from blowing it down. By having a board not more than a foot wide, the hive will extend out over the board and the less likely to kill the bees when it is placed over them, and it will leave room for the bees that may be outside of the hive to pass into it. Mr. Winslow observed that he has sometimes found three swarms at once pitched on one board in different places. When he first puts up the board he usually rubs it with some honey or salt water, herbs or the like, but this may not be necessary.

We think that this method of hiving bees is a great improvement, as it saves time and trouble, and danger of being stung, and injury of trees frequently occasioned by cutting them in hiving bees. Another great advantage, the timorous can be saved the misery of being frightened half to death lest they should be stung while on a ladder or tree without the privilege of running from the enemy.—*Yankee Farmer.*

## GREAT SALE OF IMPORTED CATTLE.

On Tuesday, at Powelton, was held the great sale of imported cattle which has been lately advertised in the newspapers, Messrs. M. Thomas & Son being the Auctioneers. Not less than three thousand persons attended the sale; and from the prices paid, we may perceive that the spirit of agricultural improvement among the bidders was very great. We consider the men who originated things like this, as the real patriots of the country, for they contribute greatly to its substantial improvement. Dean Swift, in his Gulliver's Travels, a book replete with deep philosophy, though the superficial merely laugh over it, says that a man who makes two blades of grass grow where only one grew before, renders more service to mankind than the whole race of politicians.—We respond to this sentiment, by saying that whoever imports one domestic animal for the substantial improvement of the agricultural interest; or invents at home, or introduces from abroad, the slightest improvement in any mechanic art, renders more service to our great country than all the ward politicians that ever caucussed, or than all the loafers in literature that ever attempted to poison the world with false taste or meretricious principles. Success to the enterprising importer, and to the liberal and intelligent purchasers.

COWS.

| Name. | Age. | | Purchaser. | Amount. |
|---|---|---|---|---|
| Ruth | 6 | yrs. old | J. R. Neff | $460 |
| Adelaide | 6 | " | do | 390 |
| Minna | 5 | " | Clarkson | 520 |
| Lucia | 6 | " | Neff | 480 |
| Empress | 5 | " | Cunningham | 420 |
| Brighteyes | 4 | " | do | 490 |
| Beauty | 4 | " | Neff | 540 |
| Vermillion | 4 | " | Wetherill | 430 |
| Nonsuch | 3 | " | Warwick | 410 |
| Media | 3 | " | Fisher | 380 |
| Ruby | 3 | " | Roach | 370 |
| Mayflower | 3 | " | Cunningham | 515 |
| Profitable | 3 | " | Neff | 550 |
| Clarkville | 2 | " | do | 688 |
| Virginia | 2 | " | Cunningham | 690 |
| Woodbine | 2 | " | Robinson | 400 |
| Belicia | 1 | " | Andrew | 450 |
| Celebrity | 3 | " | Wetherill | 480 |
| Isabella | 5 | " | Wolbert | 405 |
| | | | | $9,110 |

BULLS.

| | | | | |
|---|---|---|---|---|
| Hector | 2 | " | J. R. Neff | 475 |
| Sir Robert | 2 | " | Wetherill | 350 |
| Melbourne | 2 | " | Sampson | 320 |
| Maxwell | 1 | " | Canby | 400 |
| Llewellyn | 1 | " | Gaskill | 210 |
| Colostra | 1 | " | Wolbert | 260 |
| Miser | 1 | " | Cunningham | 470 |
| Brutus | 1 | " | Neff | 330 |
| Delight | 1 | " | Eldridge | 370 |
| P. of Wales | 1 | " | Kelly | 310 |
| L'd Fairfaix | 1 | " | Andrew | 250 |
| Bruce | 1 | " | Roach | 360 |
| Primo | 1 | " | Sampson | 310 |
| Nimrod | 2 | " | Hunter | 470 |
| Colossus | 3 | " | Hickman | 310 |
| | | | | $14,305 |

SHEEP.

| | | | | |
|---|---|---|---|---|
| 2 | Bakewell breed, | at | $100 each, | $200 |
| 5 | " " | | $95 " | 475 |
| | | | Total, | $14,980 |

## TO DESTROY THE HESSIAN FLY.

A farmer in Ohio has adopted the following successful expedient:—He sows early in September, and feeds it down in November. The fly is lodged in the lower joints of the grain, and is *bitten off and destroyed* by the cattle or sheep which feed upon it. The wheat becomes well established by being sown early, and shoots so vigorously in spring as to be little if any affected by the fly. An experiment was made in two adjoining fields, sown at the same time: one was *not* fed down, and was nearly destroyed by the Hessian fly; the other *was* fed down, and wholly escaped the insect. We state this on the best authority.—*The Cultivator.*

## BALTIMORE PRODUCE MARKET.

☞ These Prices are carefully corrected every Monday.

| | per | from | to |
|---|---|---|---|
| Beans, white field, | bushel. | 1 25 | |
| Cattle, on the hoof, | 100lbs | 6 50 | 7 50 |
| Corn, yellow | bushel | 95 | 95 |
| White, | " | 90 | 92 |
| Cotton, Virginia, | pound | 11 | |
| North Carolina, | " | | |
| Upland, | " | 10 | 12 |
| Louisiana —— Alabama | " | | |
| Feathers, | pound. | 50 | |
| Flaxseed, | bushel. | 1 37 | 1 50 |
| Flour & Meal—Best wh. wh't fam. | barrel | 10 50 | 11 50 |
| Do. do. baker's, | " | | |
| | " | | |
| Super How. st. from stores | " | 8 50 | firm |
| " " wagon price, | " | 8 25 | |
| City Mills, super | " | 8 00 | 8 25 |
| " extra | " | 8 50 | |
| Susquehanna, | " | 9 37 | |
| Rye, | " | 5 75 | 6 00 |
| Kiln-dried Meal, in hhds. | hhd. | 94 00 | |
| do. in bbls. | bbl. | 5 25 | |
| Grass Seeds, wholes. red Clover, | bushel. | 6 50 | 7 00 |
| Timothy (seeds of the north) | " | 3 50 | 4 00 |
| Orchard, | " | 2 50 | 3 00 |
| Tall meadow Oat, | " | | 2 75 |
| Herds, or red top, | " | 75 | 1 00 |
| Hay, in bulk, | ton. | 12 00 | 15 00 |
| Hemp, country, dew rotted, | pound. | 6 | 7 |
| " water rotted, | " | 7 | 8 |
| Hogs, on the hoof, | 100lb. | 7 00 | scarce |
| Slaughtered, | " | | |
| Hops—first sort, | pound. | 9 | |
| second, | " | 7 | |
| refuse, | " | 5 | |
| Lime, | bushel. | 32 | 35 |
| Mustard Seed, Domestic, —; blk. | " | 3 50 | 4 00 |
| Oats, | " | 31 | 32 |
| Peas, red eye, | bushel. | | |
| Black eye, | " | 75 | 1 00 |
| Lady, | " | 1 00 | |
| Plaster Paris, in the stone, cargo, | ton. | | 3 50 |
| Ground, | barrel. | 1 62 | |
| Palma Christa Bean, | bushel. | | |
| Rags, | pound. | 3 | 4 |
| Rye, | bushel. | 80 | 85 |
| Susquehannah, | " | | none |
| Tobacco, crop, common, | 100 lbs | 2 50 | 3 50 |
| " brown and red, | " | 4 00 | 6 00 |
| " fine red, | " | 8 00 | 10 00 |
| " wrappery, suitable for segars, | " | 10 00 | 20 00 |
| " yellow and red, | " | 8 00 | 10 00 |
| " good yellow, | " | 8 00 | 12 00 |
| " fine yellow, | " | 12 00 | 16 00 |
| Seconds, as in quality, | " | | |
| " ground leaf, | " | | |
| Virginia, | " | 4 50 | 9 00 |
| Rappahannock, | " | | |
| Kentucky, | " | 4 00 | 8 00 |
| Wheat, white, | bushel. | | |
| Red, best | " | 1 60 | 1 75 |
| Maryland inferior | " | 1 10 | 1 40 |
| Whiskey, 1st pf. in bbls. | gallon. | 39 | 40 |
| " in hhds. | " | | 37 |
| " wagon price, | " | bbls | 30 |
| Wagon Freights, to Pittsburgh, | 100 lbs | 1 50 | — — |
| To Wheeling, | " | 1 75 | — |
| | | washed. | unwash |
| Wool, Prime & Saxon Fleeces, | pound. | 40 to 50 | 20 22 |
| Full Merino, | " | 35 40 | 18 20 |
| Three fourths Merino, | " | 30 35 | 18 20 |
| One half do. | " | 25 30 | 18 20 |
| Common & one fourth Meri. | " | 25 30 | 18 20 |
| Pulled, | " | 28 30 | 18 20 |

## MORUS MULTICAULIS TREES.

The subscriber has from 25,000, to 30,000 Morus Multicaulis trees now growing at his residence, with roots of 1, 2, and 3 years old, which will be ready for sale this fall, and which he will sell on moderate terms.

EDWARD P. ROBERTS.

Baltimore, Md.

## BALTIMORE PROVISION MARKET.

| | per. | from. | to. |
|---|---|---|---|
| Apples, | barrel. | —— | —— |
| Bacon, hams, new, Balt. cured, | pound. | —— | 13½ |
| Shoulders, ..... do | " | —— | 11 |
| Middlings, ..... do | " | do | do |
| Assorted, country, | " | 10 | 10½ |
| Butter, printed, in lbs. & half lbs. | " | 20 | 25 |
| Roll, | " | — | — |
| Cider, | barrel. | —— | —— |
| Calves, three to six weeks old, | each. | 5 00 | 6 00 |
| Cows, new milch, | " | 25 00 | 40 00 |
| Dry, | " | 9 00 | 12 00 |
| Corn Meal, for family use, | 100lbs. | 2 00 | 2 06 |
| Chop Rye, | " | —— | 1 75 |
| Eggs, | dozen. | 18 | —— |
| Fish, Shad, No. 1, Susquehanna, | barrel. | 6 75 | —— |
| No. 2, | " | 6 50 | —— |
| Herrings, salted, No. 1, | " | 2 75 | 2 87 |
| Mackerel, No. 1, —— No. 2 | " | 9 00 | 10 00 |
| No. 3, | " | 4 75 | —— |
| Cod, salted, | cwt. | 3 00 | 3 25 |
| Lard, | pound. | 9 | 10 |

## BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

| | |
|---|---|
| U. S. Bank, | par |
| Branch at Baltimore, | do |
| Other Branches, | do |
| **MARYLAND.** | |
| Banks in Baltimore, | par |
| Hagerstown, | ¼a |
| Frederick, | do |
| Westminster, | do |
| Farmers' Bank of Mary'd, | do |
| Do. payable at Easton, | 1 |
| Salisbury, 2 per ct. dis. | |
| Cumberland, | 3 |
| Millington, | do |
| **DISTRICT.** | |
| Washington, Georgetown, Alexandria, Banks, | ¼p.c. |
| **PENNSYLVANIA.** | |
| Philadelphia, | ¼a |
| Chambersburg, | 1 |
| Gettysburg | do |
| Pittsburg, | ¾ |
| York, | 1 |
| Other Pennsylvania Bks. | 4 |
| Delaware [under $5] | 6 |
| Do [over 5] | 2 |
| Michigan Banks, | 10 |
| Canadian do. | 10 |
| **VIRGINIA.** | |
| Farmers Bank of Virgin. | 2 |
| Bank of Virginia, | do |
| Branch at Fredericksburg | do |
| Petersburg, | do |
| Norfolk, | do |
| Winchester, | do |
| Lynchburg, | ¾ |
| Danville, | do |
| Bank of the Valley, | 2 |
| Branch at Romney, | 2½ |
| Do. Charlestown, | 2 |
| Do. Leesburg, | 2 |
| Wheeling Banks, | 4 |
| Ohio Banks, generally | 6a7 |
| New Jersey Banks gen. | 5 |
| New York City, | 1 |
| New York State, | 3a4 |
| Massachusetts, | 3a3½ |
| Connecticut, | 3a3½ |
| New Hampshire, | 3a3½ |
| Maine, | 3a3½ |
| Rhode Island, | 3a3½ |
| North Carolina, | 6 |
| South Carolina, | 8a10 |
| Georgia, | do |
| New Orleans, | 15 |

## INTERESTING TO FARMERS.

HAVING procured the best machinist in Maryland, we are now ready to fill all orders entrusted to our care, for the following implements:——WHEAT FANS, STRAW CUTTERS and CORN SHELLERS, &c. all of which articles are made in superior style—They also manufacture GRAIN CRADLES warranted superior to any ever manufactured in Baltimore for cost of cutting, and saving of grain, being peculiarly adapted to the economy of force and labor.—PLOUGHS of all descriptions neatly got up. The public are invited to call and judge for themselves; the subscribers being confident that all persons competent to discriminate between the relative value of implements of husbandry, will give the preference to theirs. JOHN T. DURDING & CO.

je 27 4t Fronting Grant and Ellicott sts.

## A BROOD MARE & TWO COLTS FOR SALE.

The subscriber is authorised to sell a brood MARE with her two foals—the mare is half sister to Bachelor, her eldest colt now rising one year old is by Messenger, a full blooded horse, the other was dropt the last spring, is by Young Tom, one of the purest of the Tom blood in the country, and is himself one of the fastest trotters and rackers any where to be found, EDW. P. ROBERTS,

au 29 4t Baltimore, Md.

## MULBERRY TREES.

THE Queen Ann's County Silk Company have the following Trees for sale:

50,000 Morus Multicaulis or Chinese Mulberry
200,000 Morus Alba or Italian Mulberry
500,000 Morus Multicaulis Cuttings.

The company will sell the above trees at moderate prices and deliver them free of charge in Baltimore if required. It is thought by practical growers that they should be removed in the fall. WM. HARPER, Treas'r.

Centreville, E. Shore, Md.

☞ The 'Silk Culturist,' and Ruffin's 'Register,' will please publish the above three times, and mark the cost at bottom. se 20 3t

## A DURHAM BULL FOR SALE.

UNCAS, a beautiful white Bull of the improved Durham short-horn breed, 3 years old, will be sold a bargain, $250, as his owner, desirous of changing his cross, bought another bull at the sale of Mr. Whittaker's stock. Uncas has a pedigree tracing to the herd-book, and will be warranted pure.

☞ Applications by letter to be post-paid. Address

s 29 EDWD. P. ROBERTS, Baltimore, Md.

## DURHAM & AYRSHIRE CATTLE.

The subscriber is authorised to sell the following superior Cattle:

*Montezuma, an improved Durham short-horned* bull, a light, or fashionable roan. He was *imported* by Reris D. Shepherd, Esq. in March, 1835, for whom he was purchased from Mr. Page in the county of Durham, England. Montezuma was got by *Wharfingdale*, dam by *Mancenbonum*, g. d. by Priam: he was calved 30th March, 1833.

As an evidence of his superior powers in the perpetuation of his species, we would state, that he is the sire of *Nancy Thompson* and *Hampton*, calves now owned by Mr. George Beltzhoover. Nancy Thompson, was calved in March last, and now weighs 527 lbs. Hampton was calved 4th May last, and how weighs 380 lbs. Indeed all the calves of Montezuma, which we have seen, are remarkable for their extraordinary size and fine points:

A *short horn improved Durham bull* calf, 3 months old, got by Neptune, he by Orozimbo out of a full-blooded Durham heifer, 2 years old, the dam of which was imported by R. D. Shepherd, Esq. and sold to the Hon. Hy. Clay.

6 *Ayrshire* calves, 3 males and 3 females, from 2 to 8 months old. These calves are all out of cows imported by R. D. Shepherd, Esq selected by his Agent from the best herd in the kingdom of Great Britain. The mothers of two of hose calves, with their first calf, respectively, gave 20 and 24 qts of milk per day when fresh.

The Ayrshire breed of Cattle is justly considered the best dairy cows in Scotland, they are of medium size, hardy of constitution, docile in disposition, easily kept, and deep milkers, yielding as much *milk* and *butter*, weight considered, as any other variety.

Letters *post paid* to the subscriber will meet with prompt attention. EDWARD P. ROBERTS,

Editor Farmer and Gardener, Baltimore, Md.

sep 12 4t

## GARDEN SEED.

THE subscriber has just received his general supply of fresh Garden Seeds from the Messrs. Landreth's of Philadelphia—those for retailing bearing their label and warranted. The Messrs. Landreths grow the most of the seeds they vend, and theirs is the oldest and probably the most extensive establishment in this country, and their seeds have no rival as to quality. Orders from country dealers will be supplied at short notice. Catalogues furnished gratis.

JONATHAN S. EASTMAN.

Feb. 14

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## AMERICAN FARMER.

COMPLETE sets of this excellent periodical, consisting of 15 volumes each, for sale at this office.